

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows. Page and line numbers refer to the application as originally filed. Paragraph numbers refer to the application as published (US 2004/0081087, April 29, 2004).

Page 10 line 21 – page 11 line 13 (par. 40):

The driver 104 maintains a network topology database 132. This database 132 contains information regarding the topology of the network as is useful for routing packets and determining destinations for valid packets. Target storage node 126 includes port 136 and disk server 170. Target storage node 126 may also include driver 150 and topology database 152. Target storage node 128 includes ports 138, 140 and RAID system 142. Target storage node 128 may also include driver 160 and topology database 162. Moreover, a node, e.g. node 100, may query a name-table stored in the Fabric to verify that ~~[[is]]~~it has a redundant path to the other end of the connection~~[[, e.g.]].~~ For example, port 140 would be a redundant path to node 126 that is being accessed through port 138, in case the WWNN and WWPNN, e.g., associated with port 138, are moved to ~~[[his]]~~this physical interface, e.g. port 140. Typically, driver 104 and topology database 132 reside in memory of the computer system of a node. For example, portions of the driver 104 and topology database 132 may reside in memory. The driver 104 may execute in a processor of the node. Portions of the driver 104 and topology database 132 may also reside in memory, for execution by a processor.

Page 12 lines 3 – 12 (par. 42):

FIG. 2 illustrates an alternative way of connecting a large number of nodes ~~100, 102, 130, 132~~ 200, 202, 230, 232 to the target storage nodes ~~126, 128~~ 226, 228 according to an embodiment of the present invention. In this example, the data network 221 includes respective loops 241, 242, 243, 244 connected to each of the target storage nodes ~~126, 128~~ 226, 228. Each of the nodes ~~100, 102, 130, 132~~ 200, 202, 230, 232 has at least two ports, each of which is connected to a respective loop connected to the port of a different one of the target storage nodes ~~126, 128~~

226, 228. Therefore, if there is a single failure of any one of the loops or a single failure of any one of the target storage nodes ~~126, 128~~ 226, 228, there will still be an operational path from each of the nodes ~~100, 102, 130, 132~~ 200, 202, 230, 232 to the target storage nodes ~~126, 128~~ 226, 228. The loops 241, 242, 243, 244, for example may operate in accordance with the Fibre Channel standards.

Page 13 line 14 – page 14 line 2 (par. 46):

FIG. 4 illustrates a detailed block diagram 400 of the Fibre Channel network of FIG. 1. In FIG. 4, each of the nodes 401, 430 is shown to have host ports 465, 466 directly linked to a port adapter 436 via switches 441, 443. Thus, if a switch is replaced with a different switch, the WWN associated with a port will change. Consider a host node 430 connected to a target storage node 450 through a host port 466 that is connected to a ~~[[f]]Fibre [[c]]Channel~~ switch 443 that is also connected to a target storage port 474. The target storage node 450 may query a topology database 480 stored in the port adapter to verify that ~~[[is]]it~~ has a path to the host port 446 through a redundant port 473 in case the WWNN and WWPNN associated with port 474 are moved to the physical interface implemented by port ~~[[373]]~~473.

Page 17 line 17 – page 18 line 9 (par. 56):

FIG. 6 illustrates a flow chart 600 for verifying existence of a redundant Fibre Channel path according to an embodiment of the present invention. A first physical interface and a backup physical interface are coupled to the Fibre Channel fabric. In FIG. 6, a determination is made whether periodic verification of redundant paths is to be performed 610. If yes 612, the verification is performed 640. If not 614, a determination is made of whether a connection is added or removed from a ~~[[Fiber]]Fibre~~ Channel Fabric 620. If not 622, the system continues to wait until a connection is added or removed or until the verification period has elapsed. If a connection is added or removed 624, as indicated by a State Change Notification for example, all devices on the Fabric are then notified that a device has either been added or removed. If a connection

is added or removed 624, a State Change Notification occurs 630. All devices on the Fabric are then notified that a device has either been added or removed. Verification of whether the backup physical interface has the connection is performed 640. A determination is made whether a redundant physical path exists to the other end of the connection in case the WWNN and WWPN are moved to this physical interface 650.

Page 19 lines 3 – 10 (par. 59):

The process illustrated with reference to Figs. 1-6 may be tangibly embodied in a computer-readable medium ~~or carrier~~, e.g., one or more of the fixed and/or removable data storage devices 488 illustrated in Fig. 4, or other data storage or data communications devices. The computer program 490 may be loaded into memory 477 to configure the processor 478 for execution of the computer program 490. The computer program 490 ~~include~~ includes instructions which, when read and executed by a processor 478 of Fig. 4, causes the processor 478 to perform the steps necessary to execute the steps or elements of an embodiment of the present invention.